

BHAVANA CK

1BM20CS403

CSE-4A

Program 9: Movie database

Consider the schema for Movie Database:

ACTOR (*Act_id, Act_Name, Act_Gender*)
DIRECTOR (*Dir_id, Dir_Name, Dir_Phone*)
MOVIES (*Mov_id, Mov_Title, Mov_Year, Mov_Lang, Dir_id*)
MOVIE_CAST (*Act_id, Mov_id, Role*)
RATING (*Mov_id, Rev_Stars*)
Write SQL queries to

1. List the titles of all movies directed by 'Hitchcock'.
2. Find the movie names where one or more actors acted in two or more movies.
3. List all actors who acted in a movie before 2000 and also in a movie after

2015 (use JOIN operation).

4. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.
5. Update rating of all movies directed by 'Steven Spielberg' to 5.

CREATE DATABASE MOVIE;
USE MOVIE;

CREATE TABLE ACTOR (

```
ACT_ID INT,  
ACT_NAME VARCHAR (20),  
ACT_GENDER CHAR (1),  
PRIMARY KEY (ACT_ID));
```

```
CREATE TABLE DIRECTOR (  
DIR_ID INT,  
DIR_NAME VARCHAR (20),  
DIR_PHONE LONG,  
PRIMARY KEY (DIR_ID));
```

```
CREATE TABLE MOVIES (  
MOV_ID INT,  
MOV_TITLE VARCHAR (25),  
MOV_YEAR INT,  
MOV_LANG VARCHAR (12),  
DIR_ID INT,  
PRIMARY KEY (MOV_ID),  
FOREIGN KEY (DIR_ID) REFERENCES DIRECTOR  
(DIR_ID));
```

```
CREATE TABLE MOVIE_CAST (  
ACT_ID INT,  
MOV_ID INT,  
AROLE VARCHAR(10),  
PRIMARY KEY (ACT_ID, MOV_ID),  
FOREIGN KEY(ACT_ID) REFERENCES ACTOR(ACT_ID)  
ON DELETE CASCADE,
```

FOREIGN KEY(MOV_ID) REFERENCES
MOVIES(MOV_ID) ON DELETE CASCADE);

CREATE TABLE RATING (
MOV_ID INT,
REV_STARS VARCHAR (25),
PRIMARY KEY (MOV_ID),
FOREIGN KEY (MOV_ID) REFERENCES MOVIES
(MOV_ID));

INSERT INTO ACTOR
VALUES (301,'ANUSHKA','F'),
 (302,'PRABHAS','M'),
 (303,'PUNITH','M') ,
 (304,'JERMY','M');
select * from actor;

INSERT INTO DIRECTOR
VALUES (60,'RAJAMOULI', 8751611001),
 (61,'HITCHCOCK', 7766138911),
 (62,'FARAN', 9986776531),
 (63,'STEVEN SPIELBERG', 8989776530);
select * from director;

INSERT INTO MOVIES
VALUES (1001,'BAHUBALI-2', 2017,'TELAGU', 60),
 (1002,'BAHUBALI-1', 2015, 'TELAGU', 60),
 (1003,'AKASH', 2008, 'KANNADA', 61),

```
(1004,'WAR HORSE', 2011, 'ENGLISH', 63);  
select * from movies;
```

```
INSERT INTO MOVIE_CAST  
VALUES (301, 1002, 'HEROINE'),  
       (301, 1001, 'HEROINE'),  
       (303, 1003, 'HERO'),  
       (303, 1002, 'GUEST'),  
       (304, 1004, 'HERO');  
select * from movie_cast;
```

```
INSERT INTO RATING  
VALUES (1001, 4),  
       (1002, 2),  
       (1003, 5),  
       (1004, 4);  
select * from rating;
```

----- List the titles of all movies directed by
'Hitchcock'.

```
SELECT MOV_TITLE  
FROM MOVIES  
WHERE DIR_ID IN (SELECT DIR_ID  
FROM DIRECTOR  
WHERE DIR_NAME = 'HITCHCOCK');
```

Result Grid		Filter Rows:
	MOV_TITLE	
▶	AKASH	

----- Find the movie names where one or more actors acted in two or more movies.

```
SELECT MOV_TITLE
FROM MOVIES M, MOVIE_CAST MV
WHERE M.MOV_ID=MV.MOV_ID AND ACT_ID IN
(SELECT ACT_ID
FROM MOVIE_CAST GROUP BY ACT_ID
HAVING COUNT(ACT_ID)>1)
GROUP BY MOV_TITLE
HAVING COUNT(*)>1;
```

Result Grid		Filter
	MOV_TITLE	
▶	BAHUBALI-1	

--- List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).

```
SELECT ACT_NAME, MOV_TITLE, MOV_YEAR
```

```

FROM ACTOR A
JOIN MOVIE_CAST C
ON A.ACT_ID=C.ACT_ID
JOIN MOVIES M
ON C.MOV_ID=M.MOV_ID
WHERE M.MOV_YEAR NOT BETWEEN 2000 AND
2015;

```

Result Grid		Filter Rows:		Export:	
	ACT_NAME	MOV_TITLE	MOV_YEAR		
▶	ANUSHKA	BAHUBALI-2	2017		

----- Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.

```

SELECT MOV_TITLE, MAX(REV_STARS)
FROM MOVIES
INNER JOIN RATING USING (MOV_ID)
GROUP BY MOV_TITLE
HAVING MAX(REV_STARS)>0
ORDER BY MOV_TITLE;

```

Result Grid			Filter Rows:
	MOV_TITLE	MAX(REV_STARS)	
▶	AKASH	5	
	BAHUBALI-1	2	
	BAHUBALI-2	4	
	WAR HORSE	5	

----- Update rating of all movies directed by 'Steven Spielberg' to 5 KL.

```
UPDATE RATING
SET REV_STARS=5
WHERE MOV_ID IN(SELECT MOV_ID FROM MOVIES
WHERE DIR_ID IN(SELECT DIR_ID
FROM DIRECTOR
WHERE DIR_NAME = 'STEVEN SPIELBERG'));
```

```
select * from rating;
```

Result Grid			Filter Rows:
	MOV_ID	REV_STARS	
▶	1001	4	
	1002	2	
	1003	5	
	1004	5	
*	NULL	NULL	